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EREP MONTHLY PROGRESS REPORT - NUMBER 1

Period: March 15, 1973, to May 15, 1973

INVENTORY OF FOREST AND RANGELAND RESOURCES, INCLUDING FOREST STRESS

Registration No. 418

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A. Overall Status

The state of readiness report was submitted on April 22, 1973, indicating that our work was well under way and that we expected to be prepared for Skylab and ERAP flights during the SL-2 mission at our Atlanta, Georgia, and Manitou, Colorado, sites.

We have had difficulty getting some of our equipment completely assembled and calibrated by our expected May 22 or May 27 flight date. As soon as our contract was signed on March 7, we ordered much of the electronic equipment needed to modify our ground spectrometers and to assemble the airborne silicon vidicon spectrometer. Late delivery of detectors and filters and receipt of faulty equipment has hampered our progress. However, the spectrometers have been assembled and will be installed at our Atlanta site by May 20, 1973.

A crew of five men has prepared the Atlanta site by erecting four steel towers (two 20 foot and two 60 foot) over four representative forest land use sites. Ground inspection has been made of the condition of the forest land use classes along the expected SL-2 ground track 43. R. C. Aldrich, R. C. Heller, and F. P. Weber will attend the site and be prepared to communicate with Mr. Ryborn Kirby at Houston.

Three men at the Manitou range site are checking range condition and type along the SL-2 track (number 48) for the expected June 1 overflight. Dr. R. S. Driscoll is prepared to communicate with the PIMO discipline team for Agriculture/Forestry.

Two men are assembling one additional 80-foot steel tower over newly infested and dying pine trees in the Black Hills near Lead, South Dakota. This is in preparation for a SL-3 mission in August 1973 along track 2.

Requests for proposals to process S192 data have been sent to several prospective bidders. Date of bid opening is May 31, 1973.

B. Recommendations Concerning Decisions Required to Ensure Attainment of Experiment's Scientific Objectives

No changes from our proposed work as outlined in the Statement of Work or our proposal are anticipated at this time.

C. Expected Accomplishments During Next Reporting Period

1. The Data Collection Platforms (DCP's) will be transported to our Atlanta site and the antennas installed on the 60-foot towers. They will begin transmitting ground spectral radiance data to ERTS-1 by May 21, 1973.

2. The 80-foot steel tower will be erected at our Black Hills site for installation of one RS-Z1 spectrometer and DCP.

3. We shall await instructions from Houston to determine whether data will be collected from our test sites on SL-2. Both test sites (Atlanta and Manitou) are in a state of readiness should we be notified that SL-2 becomes a viable mission for earth resources data collection.

D. Significant Results

None to report prior to launch or receipt of data.

E. Summary Outlook

We shall require more time to assemble and calibrate our silicon vidicon system before we can expect reasonable results that can be used to compare with S192 and ground spectrometer data.

Our forest and range experiment is in jeopardy with the present unknown condition of the Skylab workshop. We shall stand by and hope that the malfunctions can be corrected.

F. Travel Summary and Plans - May 15 to June 15, 1973

1. Completion of Atlanta test site by May 22, 1973.

a. R. C. Aldrich and two assistants return to Berkeley, Calif., via airlines

b. R. C. Heller and F. P. Weber leave Atlanta about May 23, 1973, to return to Berkeley, California, via Black Hills in government aircraft N176Z.

c. T. H. Waite to be picked up in Spearfish, South Dakota, about May 23 following his installation of 70-foot steel tower, by government aircraft N176Z.

2. R. S. Driscoll and two assistants return to Fort Collins, Colorado, following completion of range evaluation by May 25, 1973.

3. Upon receipt of information from PIMO that earth resources data will be collected over our test sites in Atlanta and Manitou:

a. R. C. Aldrich, F. P. Weber, and R. C. Heller will return to Atlanta to man the site and begin operation of all four ERTS DCP'S.

b. R. S. Driscoll and two assistants will man the Manitou site and keep PIMO informed of weather conditions and state of readiness.